Insight
Questions & Answers
As of November 3, 2010

Q81: The Industry Day discussion regarding expectations and section requirements for research proposals submitted to technical area 9 seemed to indicate that what was expected was a smaller 5-10 page white paper (including technical capabilities, statement of work, etc.) rather than the larger requirements as outlined in the BAA. Is that true?

A81: The BAA details the sections and page limits of a conforming proposal. Some sections are not applicable to every TA, those are so marked. Nothing that was presented at the Industry Day changes or conflicts with the contents of the BAA. As the page limits are not to exceed values, it is possible for a conforming proposal to come in at 5-10 pages.

Q80: The INSIGHT BAA mentions, "The Government intends to use 6.2 —Applied Research funding for Technical Area 9 —Accelerated Innovation awards." Does this mean that for Industry participants proposing to TA9, the overhead rate and the allowable fees will be capped to the levels allowed for Universities or as governed by 6.2 rules?

A80: There are no overhead/fee limitations imposed on 6.2 money.

Q79: The BAA calls for a cost breakdown by month. But the Attachment 1 Cost Proposal checklist, has additional requirements (by quarter and by year) that do not seem to be included in the BAA: "Does your Cost Proposal include (1) a summary cost buildup by quarter, (2) a summary cost buildup by Year, and (3) a detailed cost buildup that breaks out each task and shows the cost per month?" Please clarify if, per the checklist, we also need to provide these summary buildups by quarter and by year. Are these Government Quarters and Government Fiscal Years?

A79: Yes, per BAA Section 2.9 Cost Summaries {4 pages}, proposers should provide in their Technical Proposal a top level total cost summary for Phase 1. Include estimates of cost for each task and subtask by quarter and delineate prime and major subcontractor efforts. Note company cost share, if applicable. Yes, delineate your summaries per Government Fiscal Year.

Q78: Reference the FAQ Question #61. We understand that DARPA needs detailed costs broken out by task. We also understand that DARPA needs to know the costs per month. The detailed costs by task will provide DARPA with granularity into each task. A summary of total costs by month will provide DARPA with a funding profile. As indicated by the person that asked Question #61, to provide cost detail by task and by month will generate a huge file. If we assume 10 tasks over the 24 month period of

performance, then you will have 240 columns of pricing data. Does DARPA need the detailed costs broken out by-month-by-task?

A78: Yes, this information is utilized a number of ways during the evaluation and (if selected) negotiation process. As stated in the BAA, the cost volume has no page limit.

Q77: Upon reviewing the BAA 10-94 solicitation, it is apparent there is a need to encourage collaboration among the successful program awardees to enable productive collaboration. However, it is not clear from the Section 2.4 SOW description that is given on page 39 of 68 provided in Amendment 4 what information should be provided regarding Associate Contractor Agreement (ACA). The statement reads, "The SOW must include the offerors responsibilities regarding the exchange of information under their respective Associate Contractor Agreements, to include specifically identifying the types of information/documentation that the offeror will make available to other associate contractors and the types of information/documentation that the other associate contractors will need to make available to the offeror in order to accomplish the overall program goals and objectives." In the INSIGHT program, the proposers do not know the identity of potential awardees and interfaces to practically establish what information should be exchanged. Since DARPA will be coordinating and selecting the collaboration partners, will it be better for DARPA to provide a generic ACA and have the proposer decide if they can comply with the generic requirements and where they will need exemptions. Question 33 of the Insight Q/A touched upon the ACA issue but does not explain how the proposers can address compliance with the anticipated ACA clause. Please provide clarification if this is something that will be established after award and supplied by DARPA or is it an issue that must be addressed by all proposals in the SOW and, if so, what guidance can be provided since we cannot anticipate all the potential interfaces.

A77: The BAA includes an example ACA clause that defines the minimum level of cooperation DARPA expects from each contractor. As stated in the BAA, the proposed SOW must identify the TYPES of information/documentation that the proposer will make available to other associate contractors and the TYPES of information/documentation that the other associate contractors will need to make available to the proposer in order to accomplish the overall program goals and objectives. The proposer's management plan should outline the strategies expected to be employed in implementing an ACA to the best benefit of Insight and the government. Proposers are not expected to have pre-negotiated ACAs with other potential Primes included in their proposals. The actual ACA's do not need to be in place until after selections are made and prior to the first kick-off meeting.

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Q76: BAA reference I.C. Program Structure (page 24 of 68). Based on the program structure, is it the Government's desire that offers bid to Phase 1, a 24-month schedule, but also include a schedule for the 30-month Phase 2 that is not priced in lieu of a follow-on solicitation?

A76: The BAA requests a proposal for Phase 1 only.

Q75: BAA reference I.D. Schedule (page 25 of 68) Figure 4 includes Field Test 1 as scheduled to begin 23 Oct. and run through 02 Nov. 2010. Has Field Test 1 begun as part of another contract, or will it be scheduled at a later date under this procurement?

A75: Field Test 1 is being executed via other contracts.

Q74: BAA reference: IV.2 Volume 1 - Technical Proposal: The BAA states "charts may use 10 pt font" - Question: Does that requirement include graphics and tables? Can graphics be a smaller font than 10pt?

A74: Yes, charts, graphics and tables should use fonts no smaller than 10pt.

Q73: BAA reference: IV.2 Volume 1 - Technical Proposal: The BAA defines "a 'page' is 8-1/2 by 11 inches." Question: Can offerors use 11X17-inch pages for large scale graphics and/or schedules (2.6 Schedule and Milestone) that would otherwise not fit on 8-1/2 by 11 pages, given the font requirements.

A73: No, as defined in the BAA "a 'page' is 8-1/2 by 11 inches."

Q72: BAA reference: Volume 2 - Cost Proposal: "Refer to Attachment 1 for a Cost Proposal checklist" - Questions: Shall we expect receiving Attachment 1?

A72: Attachment 1 has been available at http://www.darpa.mil/ipto/solicit/baa/BAA-10-94_Attach01.pdf

Q71: IV.B.Volume 1 2.9 - The Government calls for Cost Summaries within the Technical Volume. Is it the Government's desire to see the summary using actual dollar figures or percentages, or some other format?

A71: Actual dollar values.

Q70: BAA reference I.B TA1. "TA1 performer will develop an innovative hardware and software architecture to maintain an adaptive and agile user experience by rapidly integrating new algorithms via a standardized application programming interface": For the purposes of planning TA5, can the Government please clarify the availability of interface control drawings (ICD) for the following DARPA-designated/GFE intended for employment during this phase of the Insight project?

A70: Supporting documentation from Government Furnished Property systems will be made available to the selected performer as soon as possible after award.

Q69: The BAA lists several external data sources (e.g. GMTI, OSINT, SIGINT, HUMINT, Law Enforcement, Imagery data), and I assume that the data will be pre-processed in the multisource exploitation system prior to forwarding information on to

the Human-Machine Interface for display and use by the operators. Can you provide any details on the types of data that will be forwarded to the HMI computer other than track information (position/ID data)?

A69: The HMI will coordinate the display of all information necessary for an analyst to fulfill their exploitation mission. Additionally, the HMI will coordinate the display of all information necessary for an analyst to explore and verify the hypothesis generated by Technical Area 2.

Q68: Will commercially available software applications such as facial recognition software/ voice ID software be expected to be used as part of Insight or would you expect the operators to use images in a standalone database to compare to data being received real-time? In other words, would the operators be manually matching images or would they be more likely to look at the output from software applications and possibly make decisions based on the output of these applications?

A68: "Manually matching images", other than for final confirmation against an algorithmically selected candidate, is not sufficiently automated to address Insight objectives. Integration of the output of automated applications into the exploitation process is consistent with the details of the BAA.

Q67: Is the intent to have Insight operate as a standalone system, or is it expected to be an application that is added to current military command and control workstations?

A67: Insight is a standalone system whose input and output may be provided by or applicable to existing system. There is an expectation that subsystem assemblies will be found useful and integrated into other applications.

Q66: Is the Insight system expected to be operating at multiple locations or at a single centralized location? If it is operating at multiple locations, will the different workstations communicate with each other or share data if they are not receiving the same data feeds?

A66: Insight is likely to be a distributed system; maintenance of a cohesive unified data view is a Technical Area 1 objective.

Q65: How will Insight communicate with other assets, such as other military command posts, or soldiers/special forces on the ground? And how will they be able to provide resource management commands/requests? In other words, will the communication be between people or will there be a network that passes messages between nodes in the network?

A65: An Insight goal is to increase automated support for all facets of the exploitation mission. Push and pull of data will extend further throughout the program, eventually to the tactical edge. Technical Area 2, in coordination with Technical Areas 3 and 4, is responsible for the formation and execution of exploitation missions.

Q64: What is the expectation for the use of social networking – will the operators be able to 'chat' or 'text' using smartphones and/or classified internet connections? Would this also be a method of transferring data around the Insight network? For example,

would soldiers/special forces/etc. on the ground be able to take a photo and send it via smartphone to an Insight operator?

A64: The use of social networking constructs and enablers to enhance analyst efficacy is an area of interest. To “take a photo and send it via smartphone to an Insight operator” without intervening level 0 exploitation is not within the scope of Insight.

Q63: Section C. Other Eligibility Requirements; Subsection 1. Ability to support classified design and development, we have a TS facility clearance, but are in process of having safeguarding authorization. Our proposed subcontractor does have safeguarding approval and is allowing us to use their facility (down the street from us) until our safeguarding is approved. In addition, we currently have already contracted to have a SCIF built within our offices and operational in Feb, 2011. We assume this combination of using our subcontractor facility until our secret and TS/SCI safeguarding is approved is acceptable to DARPA?

A63: You should have sufficient access and capability to efficiently perform the efforts detailed in your proposal. See A56.

Q62: We are interested in responding to this BAA and are curious what is the difference between initial and final closing dates in this BAA?

A62: Per the BAA, the full proposal (including any classified appendices) and encryption password must be submitted per the instructions in Section IV.B - Content and Form of Application Submission by the initial closing (noon, 11/10/10) in order to be considered during the initial evaluation phase. Proposals may be submitted until the final closing date/BAA expiration (noon, 3/1/11), offerors are warned that the likelihood of funding in Technical Areas 1 – 6 is greatly reduced for proposals submitted after the initial closing date. The likelihood of funding for proposals submitted to Technical Area 9 will remain the same for the life of the BAA.

Q61: The BAA and its Attachment 1, Cost Volume Checklist, call for “a detailed cost buildup that breaks out each task and shows the cost per month”, among other things. Does this mean that pricing detail that's at the same level as the Attachment's pricing template shows is to be provided for every month for every task? If so, then there is concern that the resulting pricing tool volume needed for such an exceptional degree of granularity would significantly increase the potential for bugs and instability, especially for our Small Business teammates who lack a tool that can export to Excel. Therefore, would it instead be acceptable for pricing that's at that detailed level to be provided on a "by task, by GFY" basis, with sum total dollar amounts by task only being necessary for the quarterly and monthly profiles?

A61: A proposal Cost Volume should include a detailed cost buildup broken out by month. DARPA needs this level of detail to perform its scientific review and cost realism analysis.

Q60: Will the Collection and Resource Management System (TA-3) be expected to generate waypoints for some of the resources to fly?

A60: A TA-3 proposal should include discussion on how the envisioned collection and resource management activities will be accomplished in terms of interaction with ground stations and/or operators.

Q59: A32 states that the Insight system is targeted to operate at the collateral SECRET level, and the BAA requires certification at the SECRET level, but A52 states that remote access will be unclassified. Can you clarify whether the core HW/SW infrastructure developed by TA1 will be required to operate at the SECRET level during Phase 1, and if so what the expectation is for switching between unclassified and classified operation?

A59: As stated, the majority of field test system execution is expected to operate at the SECRET level, therefore the core HW/SW infrastructure developed by TA1 will expected to operate at that level. A proposal may include independent systems for various classification levels, or may propose appropriate downgrade procedures.

Q58: Can the TA1 Home Facility be located anywhere in the USA or does it need to be in any specific proximity to the NTC?

A58: The TA1 Home Facility can be located anywhere in the USA.

Q57: We have existing IP that will be provided as a part of this project's deliverables and meet this requirement for DARPA. Is it intended that this license, however, extend to other Government entities outside of DARPA?

A57: The license should ensure that there is no impediment to subsequent development or transition of the capabilities by any Government entity.

Q56: We currently have a Secret facility security clearance with upgrade to TS in-process and nearly complete. However, we do not yet have classified storage capability at the Secret level – though it has been requested. In the event that a SCIF is required for the "home office" development, we have team members in both the DC and Ohio region who can provide the SCIF space required. Will our proposal be rejected if we do not have designated SCIF facilities identified or should we identify and secure access to these facilities as a part of the proposal process?

A56: If proposing to Technical Areas 1, 2 or 5, your proposal should describe your plan to meet the following requirements from the BAA "To accommodate this situation, offerors for Technical Areas 1, 2, and 5 must be capable of supporting DoD classified TOP SECRET (TS) and Sensitive Compartmented Information (SCI) development work. This requires that proposed/designated individuals involved in the TS/SCI level work have, at a minimum, a current Special Background Investigation (SBI) and be eligible to be read on to TS level compartments AND have access to a facility approved for classified work and storage at this level (emphasis added)."

Q55: We can arrange to have a Team Partner with Secret Storage receive and store this material until we have this capability in the Home Office. Will that arrangement suffice for initiation of the project?

A55: If proposing to Technical Areas 1, 2 or 5, your proposal should describe your plan to support development activities at DoD classified TOP SECRET (TS) and Sensitive Compartmented Information (SCI) levels.

Q54: Can you please provide an example of what the government considers “non-schedule” related programmatic risks?

A54: There is no set list of what the government considers “non-schedule” related programmatic risks. A successful proposal will describe discovery and mitigation techniques for as large a set of programmatic risk events and classes as appropriate.

Q53: You have added the requirement for TA3, 4, and 6 performers to have a “current SBI”. Would a current SSBI or PPR suffice? If we have team members with recently inactive (i.e. less than 2 years, needing a billet) TS/SCI, can they be accepted and read in?

A53: Yes, current SSBI or PPR or recent access would suffice. The intent is to have qualified members be eligible quickly for TS/SCI read-on, if required. This will only be required of those individuals directly supporting integration and testing work with classified sources, not the entire team.

Q52: The BAA requires that the TA1 performer “make available appropriate operations personnel to facilitate remote 24/7 use of both facilities by other Technical Area performers”. Is the intent to schedule the off-hours support requirement in advance? Over what phases of the Insight program is the 24/7 support required?

A52: The intent is to provide an unclassified remote access data center for use by other Technical Area performers. The system itself may be remotely administered, with the level of manned support response detailed in your proposal. 24/7 access is expected as soon as possible, and should extend through-out the period of performance.

Q51: Regarding TA1, what is the key discovery (DARPA hard challenge) with respect to the integrating API?

A51: The successful TA1 proposer will provide far more than a traditional set of procedural APIs that wrap TA2, TA3, and TA4. TA1 is not middleware. Do not think of this as a simple set of library subroutines controlling data movement. By way of example, consider the lowly PC.

A PC has a set of activities of various types with various modes of operation and lifetimes. A PC also has resources ranging from processor cores to RAM to i/o devices also with various lifetimes (e.g., RAM is always there but disks can appear and disappear while the machine is booted).

The OS mediates between the activities and the resources they consume. It manages relative priorities of different activities vs. resource availability. Activities can inform the OS of their resource requirements, and the OS has a

means for understanding the parameters (e.g., bandwidth, timing constraints) of the various resources.

On a PC, the relationship between activities and resources is a matrix. A single activity can harness multiple resources (e.g., five disks, display, and keyboard), and a single resource (e.g., a disk or display) can serve multiple activities at the same time.

It is noteworthy that the interactions among activities, resources, and the OS cover both control and data flow, and this communication happens through a variety of modalities including procedure call, shared memory, timers, software interrupts (e.g., stop a process), and hardware events (e.g., i/o interrupt, page fault).

The PC also provides a means for abstracting i/o devices. For example, when you read a file you generally don't need to know if it resides on a hard disk, a network disk, a CD, or FLASH. Device-specific details (e.g., physical representation of data, error correction) are handled directly by the device or low in the OS's driver stack. An activity opening a file just calls "open". This abstraction allows for a system whereby activities do not need explicit knowledge of each and every i/o device with which they must interact.

This answer is not intended to suggest the PC model is what is correct for Insight, but rather to make clear that “middleware” is unlikely to be a sufficient response in a strong proposal. A more innovative and thoughtful model of what is required for Insight's goals is expected.

Q50: We were just approached to join a team for Insight TA6 (Virtual Environment). If we are also on other teams (2, 3, and 4), would we be precluded from being on TA6?

A50: Companies and individual performers are not limited from participating in multiple technical areas. If you are in key personnel on multiple efforts, and your total committed time across them exceeds 100%, that may negatively affect the strength of all proposals in which you're cited.

Q49: Is there an expectation that the performers of TA2 (Adaptive Multisource Exploitation System) and TA3 (Collection and Resource Management System) would bring their own novel, innovative exploitation and resource management algorithms with them, or are they mainly integrators of the algorithms included from TA9 (Accelerated Innovation)?

A49: The TA2 performer is the prime provider of algorithms to do the mission of TA2. The TA3 performer is the prime provider of algorithms to do the mission of TA3. TA2 and TA3 act in coordination with the TA1 performer who is responsible for building the operating system and manufacturing the hardware infrastructure, and the TA4 performer who is responsible for figuring out how to get it in front of the user. TA9 gives individuals and/or organizations, who are outside the typical teaming community, an opportunity to participate in Insight. The TA9 performers

will have to conform to the same architectural guidelines that everybody else has to follow when it comes time for them to integrate. They will have to meet the plug-and-play requirements, they will have been tested in the development incubator, they will have been tested in the physical environment, and they will have run the data. TA9 performers will be integrated as they demonstrate their readiness in the Virtual Environment (TA6).

Q48: With respect to the Development Incubator (TA7), has that organization been selected? If so, who will perform that task?

A48: The Development Incubator (TA7) performer has not been selected. However, DARPA anticipates that the performer will be a Service Laboratory or Federally Funded Research and Development Center (FFRDC).

Q47: How much time/geo-spatial coincident data vs. sensor data handoff? How much of the data is going to be coincident vs. data handed off from one sensor to another sensor?

A47: The intent is that all of it will be mission coincident; DARPA will try to stack the data as much as we can. There are some cases, where that's not true. In GISR-DC 1, most (if not all) of the DC 1 sensor data will be time and geospatially coincident. Scripted activities are deliberately centered within the field of regard for all participating sensors.

Q46: Who handles cross sensor registration problem biases/bias estimation?

A46: Per the technical description in the BAA, TA1 is responsible for making visible the registration that the other sensor system is doing itself. So, the sensor system is responsible for one level of registration. TA1 is responsible for normalization/putting it into a common framework. If that is insufficient to what your algorithm needs, then TA2 needs to do more.

Q45: Does the TA2 (Adaptive Multisource Exploitation System) performer integrate into the virtual environment as well as the real-time environment, yes or no? How similar are the integrated environments expected to be?

A45: Yes. The TA2 performer integrates into both the virtual and real-time environment. The virtual environment should be as legitimate a simulation of the physical environment as possible.

Q44: ARGUS-IS data and other imagery data collected during Global Intelligence, Surveillance and Reconnaissance (GISR) Data Collection (DC) 1 seems to be raw video. Will TA2 (Adaptive Multisource Exploitation System) be expected to only exploit raw video? It sounded like, during the Insight briefing, that TA2 might be exploiting tracklet type data and performing detect and track of raw video.

A44: Insight is a fusion program. The only time that Insight will exploit a raw product is when it's being fused with a product of a different type. Level zero exploitation is a sensor/ground station task. There may be instances where the level zero exploitation of a raw product isn't sufficient to the fusion process.

These cases will have to be articulated in the offeror's proposal, and are expected to emerge throughout the lifetime of the program.

Q43: Page 27 of the BAA shows the SDPs (Software Development Plans) for all TAs but there is no apparent software development for TA 5 (Physical Test Bed).

A43: The BAA appropriately anticipates minimal software development for TA 5. If an offeror proposing to TA 5 anticipates greater software development effort associated with this task, the proposal should address/make a case for this need.

Q42: During the presentation, you mentioned DARPA-sponsored sensors. Will you be adding other R&D sensors to the test bed? What mechanism is in place and under which TA?

A42: DARPA is continuously seeking new/emerging sensors, and DARPA envisions the addition of both DARPA-sponsored and other non-DARPA sponsored R&D sensors into Insight throughout the life of the program. For any sensor to participate in an Insight exercise, maturity level expectation is they are ready for deployment within 18 months. Sensor selection for non-DARPA sensors is a TA5 (Physical Test Bed) task and is addressed in the BAA.

Q41: Will Insight include access to other DARPA databases such as the TiGR (Tactical Ground Report) system as available source data or is it based upon live sensor data collection?

A41: Insight will include access to all data sources available, to include DARPA. The physical Test Bed at the NTC provides a rich data source of information beyond traditional ISR data that is expected to be included in the fusion process. Specifically, TiGR is used by training units at the NTC and is expected to be an available data source.

Q40: To what extent do you expect that Human-Machine Interface evaluation will fall under Human Use Guidelines? And, if they do, should these activities be priced separately?

A40: DARPA does not anticipate that Human-Machine Interface evaluation will fall under Human Use Guidelines in most cases. If it does, that's fine, and there is no need to separately price these activities in the proposals. See Section VI.B.4 of the BAA for further information.

Q39: What mechanism links and synchronizes software development with hardware architecture? It appears that there are separate proposal topics based on the task definitions. How does one go about proposing a reasonable software solution if they are not being designed to a specific hardware architecture?

A39: Insight relies on the engineering judgment of the TA1 (Integration, Processing and Data Archive Environment) performer to work with the TA2 (Adaptive Multisource Exploitation System), TA3 (Collection and Resource Management System) and TA4 (Unified All-source ISR Human-Machine Interface) performers to develop the adaptable architecture. The BAA includes a statement in the descriptions of each of the TAs 2 – 4, 6, and 9 that, if they

require exotic hardware or software environment components, they will provide and maintain instances at both the TA1 performer's home facility and Physical Test Bed.

Q38: There is no specific mention of COMINT. Is that covered under SIGINT?

A38: Yes. For the Insight program, SIGINT covers COMINT, ELINT, MASINT, etc. The BAA did not specifically call out COMINT because message translation is outside the scope of the Insight program. However, signals collection indicating that two parties are communicating is within the scope of Insight.

Q37: Is there an assumed communications and/or network performance level? Are there elements such as time deterministic message delivering defined or assumed latency for delivery?

A37: Yes. Proposed solutions should not be overly constrained by today's existing military infrastructure, but cognizant of existing realities and emerging capabilities. Proposed fusion processes should articulate how the system will handle such complexities as temporal/arrival rate skew, retraction, etc.

Q36: Should Human-Computer Interfaces (HCIs) be limited to a standard computer terminal or should handheld (such as Android based platforms) be included as well?

A36: It is not the intent of Insight Phase 1 to reduce the size of/miniaturize the HCI platform. The Phase 1 HCI is envisioned at the workstation/workroom size. The proposed platform/HCI should be targeted to an expert user – an experienced analyst working within a staff level analytical cell. While the goal is to get relevant information to tactical ground elements quickly, the tactical communications and devices for dissemination are outside of the scope of Insight.

Q35: You mentioned irregular warfare (IW) at the NTC as "exercise to work" in but no Special Operations Command (SOCOM)/Tier 1 Joint Special Operations Task Force (JSOTF)/U.S. IW forces interaction were mentioned. Are Tier 1 forces fusion requirements going to be supported?

A35: Insight capabilities will be relevant across the Forces but SOCOM requirements are to the far right of the Insight target audience. The primary focus of Insight is to provide quality information to conventional forces which is equally relevant to the Special Operations Forces (SOF) community. Offerors may propose specific missions to augment the Insight system, but are cautioned that Insight is not intended to operate at the raw, single sensor level.

Q34: You mentioned that TA1 (Integration, Processing and Data Archive Environment) delivers hardware. How is that different from the Development Incubator, TA7?

A34: TA7 (Development Incubator) does not deliver hardware. TA7 delivers data. TA7 has hardware, it's a library. The primary deliverable for TA1 (Integration, Processing and Data Archive Environment) is data/fused information. The TA1 performer will provide the hardware and software

infrastructure environment necessary to realize Insight's E&RM System as articulated in the BAA.

Q33: Are the TAs intended to represent potential functional area overlap within the Insight final operational capability architecture?

A33: Yes, the TAs are intended to overlap, especially TAs 1-4. This is intentional by design and why DARPA is directing that all performer contracts include an Associate Contractor Agreement (ACA) clause. Every boundary between each of the TAs is "fuzzy" and the ACAs will ensure good teaming and coordination between the TAs to ensure a functional system.

Q32: Does the system need to be able to handle classification issues as it infers, i.e., unclassified products become classified?

A32: Insight is not a Multi-Level Security program but it will need to operate at multiple security levels. Many of the data feeds will be unclassified or operate at the security classification of the sensor. Insight is targeted to operate at the SECRET/collateral level with one-way guards to enable low to high data feeds; this is the classification level typically most relevant to the targeted end user – tactical ground forces. Sources operating above this security level will be accommodated separately with their products produced at the appropriate security level and SECRET/collateral information provided to the Insight system via existing mechanisms, to include air gap transfer as required.

Q31: Are the proposal requirements for TA 9 (Accelerated Innovation) the same as the other TAs?

A31: Yes.

Q30: Is there a TA9 (Accelerated Innovation) opportunity for technologies like compilers that could help bridge the hardware/software gap?

A30: TA9 is open to and intended for any flash of brilliance. All TAs are fair game. TA9 is primarily to solicit unique/brilliant solutions.

Q29: Can a TA9 (Accelerated Innovation) proposal's Statement of Work (SOW) be dependent on selection of a TA1 (Integration, Processing and Data Archive Environment) performer? For example, a compiler to work within a particular platform?

A29: A TA9 proposal could be tied to a TA1 proposal but this is not recommended. TA9 is primarily to solicit unique/brilliant solutions which, if proven valuable, can be integrated into other TAs.

Q28: How much mixed initiative processing is envisioned? Is it primarily human initiated and machine supported or is there an equal interest in machine discovered and human supported?

A28: Mixed initiative processing is envisioned across the board and is an integral part of Insight. Insight is not envisioned as a one-for-one interaction exchange between human and machine.

Q27: You stated that GISR-DC 2 may become part of Insight. Should that be bid in the proposals and which TA would be involved?

A27: See Figure 4, Program Schedule, of the BAA and chart 17 of the Insight Industry Day briefing. GISR-DC 2 [denoted as Field Test (FT) 2 in the program schedule] as well as FTs 3-4 occur under Phase 1 of Insight. FTs 2-4 all fall under TA5 (Physical Test Bed) and should be included in a TA5 proposal.

Q26: Will TA7 (Development Incubator) deliver processed EO/radar data, such as tracklets?

A26: TA7, the Development Incubator, does not process; it stores. The Development Incubator will lower the cost of entry for, and increase the number of participants providing, new technology by serving as a repository for, and provider of, collected, simulated, and processed data.

Q25: If we want our sensors to be part of field tests 2 through 9, what TAs should we apply for?

A25: There are two possible ways to be a part of FTs 2-4, which fall under Phase 1 of Insight (note that FTs 5 through 9 fall under Phase 2 of Insight): 1) Team with a TA5 (Physical Test Bed) proposer, or; 2) have a Service partner directly interact with DARPA.

Q24: Has the Government developed an acquisition strategy for Insight Phase 2 or will that occur after the Phase 1 period of performance?

A24: Currently, the acquisition strategy for Phase 2 is the same as the acquisition strategy for Phase 1. A separate Phase 2 BAA is anticipated to be released around Q4FY12, and will be guided by the Insight Phase 1 results and successes up to that point in time. Phase 2 may, or may not, follow the organization of Phase 1.

Q23: Government Purpose Rights submitted later or immediately?

A23: Government Purpose Rights are always desirable but not designed to preclude proprietary solutions that are significant leaps in capability. If proprietary solutions are intended to be included in proposed solutions, proposals should so state and include timely mitigation strategies for both development and testing, and government transition to fielded solutions. The inclusion of proprietary solutions, or ones with less than Government Purpose Rights, should not inhibit the timely development and testing of the system. See Section I.F. of the BAA for further information on Intellectual Property.

Q22: Were there other programs that preceded, and fed into, Insight?

A22: No other programs “preceded” Insight. GISR-DC 1 (which is not a program) is being executed in October as a mass data collection effort which will serve as the initial data repository for Insight. There are existing DARPA sensor programs (e.g., VADER, ARGUS-IS, TAILWIND) that will participate in GISR-DC 1, but again only for the purposes of providing a foundational data set. Insight is

a new program and each Phase 1 proposer has their own unique experiences and qualifications to make a contribution to the program.

Q21: Does DARPA intend to provide warfighters to man positions at the Virtual Environment during exercises.

A21: No. The Virtual Environment is a data generator. If you are asking if DARPA will be providing expert users at the HCI, the answer is yes. DARPA will have a mixture of engineer/operators provided by different groups [primarily TA4 (Unified All-source ISR Human-Machine Interface)], SMEs out of the Development Incubator (TA7), and SMEs from the Transition Discovery & Oversight Team (TA8) who will all be responsible for working with the Insight system.

Q20: Has a transition partner been identified or selected?

A20: There is not a single transition partner. The TA8 (Transition Discovery and Oversight) team will continuously and throughout the lifetime of the Insight program coordinate with all other TAs on rapid transition opportunities and determine how best to represent Insight's technical capabilities to many transition partners.

Q19: is it possible to observe GISR collects?

A19: No.

Q18: Your chart number 6 (Insight E&RM System: 3 Components) outlines an overall analysis process which clearly involves contributions from data analysis/fusion, resource management, and human interactions. Who "owns" the process as a whole in the sense of architecting the processing chain, defining interfaces, ensuring consistency and interoperability, etc. Is this TA1(Integration, Processing and Data Archive Environment)?

A18: See the BAA, Figure 3, Program Organization and Chart 16 of the Industry Day Insight Briefing. No one "owns" the process as a whole; all entities shown in the chart "own" the process collectively. This is precisely why DARPA is instituting the ACAs and Leadership Groups.

Q17: The functional organization chart in the briefing (chart 15, Insight BAA Technical Areas of Interest) has asterisks indicating Task 9 insertion. There is no asterisk for task 4, HCI. Was this an oversight?

A17: This was an oversight. The updated charts posted to the BAA web site reflects that TA9 can apply to any TA.

Q16: On chart 16, you discuss system wide metrics, which by the organizational chart indicates that the functions under the test bed are also to provide metrics. However page 11 of 62 of the BAA seems to indicate integrated metrics only, over TA1 through TA4.

A16: Each of the individual TAs is responsible for providing metrics for their respective TA components, and this must be articulated in each proposal per the BAA. Each TA performer is also expected to participate in system-wide evaluation metrics, which is the collective responsibility of the Evaluation Leadership Group, the Development Incubator (TA7), and Transition Discovery & Oversight (TA8). The TA5 performer (Physical Test Bed), in particular, has a slightly more responsible role in providing the TA5 metrics because they are responsible for ensuring that there is enough quality data to conduct a meaningful system wide evaluation.

Q15: How does Insight relate to the WAND (Wide Area Network Detection) program? There seems to be some overlap. Can you clarify where WAND leaves off, and Insight picks up?

A15: In the context of Insight, WAND is a sensor. WAND will provide Insight with Level 1 exploitation products and, in some instances, Level 0 exploitation products. Insight may also augment WAND by adding additional sensors.

Q14: For TA9 (Accelerated Innovation), are there any specific topics in mind?

A14: Per the BAA, for TA9, there are no restrictions placed on sensors, information sources, or techniques explored provided that the result advances Insight's capabilities. TA9 is open to any innovative solution across the TAs.

Q13: Are there any contractual restrictions for the winning primes to add subs post award?

A13: There are no unique Insight restrictions to subcontracting. Any proposed contract change would be evaluated on a case-by-case basis. However, a subcontractor post award change must be bilaterally agreed to and the Government has the right to refuse to make the change. Proposals should contain the most accurate information for evaluation purposes.

Q12: Is there interest in capabilities that perform feature extraction on unstructured information/ internals. This seems to be a prerequisite for the semantic make up of some sources yet could be characterized as level 0 fusion which is not supposed to be part of Insight.

A12: No, level 0 is not part of Insight. First phase exploitation is expected from a mature sensor/ground station component participating in Insight.

Q11: What's the split in terms of infrastructure between TA1 (Integration, Processing and Data Archive Environment) and TA3 (Collection and Resource Management System)? TA1 was referred to as including an ISR operating system, yet this seems to be more relevant to the broad objectives of TA3.

A11: Consider TA1 responsible for all operations internal to Insight; TA3 for all things outside of Insight.

Q10: If we use unique operator insights [human observations], "the analyst is a sensor source", to improve exploitation, is that TA4 (Unified All-source ISR Human-Machine Interface) or TA2 (Adaptive Multisource Exploitation System)?

A10: Both TA2 and TA4. There must be mediation between TA4, which has the human input side, and TA2, which is asking the question. TA2 and TA4 must collectively determine how a request for information will be expressed.

Q9: Will experience with other IPTO/I2O programs for sensor fusion/networks (threat) have an evaluation advantage over those that don't have this experience?

A9: Read the Evaluation Criteria No. 4 in the BAA. Demonstrated performance on DARPA and other programs are appropriately factored into the selection process.

Q8: Is the TA5 (Physical Test Bed) performer responsible for: 1) providing aircraft, 2) integrating airborne sensors and equipment on aircraft, and 3) providing pilots and flight operations?

A8: The TA5 performer will be responsible for (1) providing aircraft and (3) providing pilots/flight operations. The TA5 performer will be responsible for the integration of new sensors only if it's trivial (i.e., the TA5 performer is not expected to build new sensor systems and integrate new sensor suites). The TA5 performer is not responsible for paying for DARPA sensors (i.e., ARGUS-IS, VADER, TAILWIND) – any DARPA sensor participation will be funded by DARPA.

Q7: Page 15 states, "Input from the context databases is expected to include environmental context (e.g., terrain, terrain features, and weather models), collection system context (e.g., platform, sensor, and communication models), and adversary models (e.g., appearance, behavior, and interaction models)." Is TA1 responsible for providing the context databases?

A7: Not directly. Context information is provided by TA5 as it relates to the physical test environment, and by TA6 as relates to the virtual test environment. These data, however, may be presented to the system via TA1's data normalization interface.

Q6: Page 12 states, "Develop the All-source Data Archive supporting normalization across types . . ." Does TA1 simply have to create representations that enable normalization/registration, or do we have to create algorithms to perform the normalization/registration?

A6: See Q/A7 above.

Q5: Can we assume that the PTB and the E&RM system are connected via the NTC Fiber Backbone? Can we get information on the expected data rate over this backbone?

A5: TA1 establishes the hardware infrastructure upon which Insight executes.

Q4: Is TA1 responsible for managing execution of HCI software? Figure 1 implies not, page 12 implies yes.

A4: The BAA states “Careful and detailed coordination is required between the TA4 and TA1 performers to ensure that the hardware and software environment meets their computational requirements.” While the HCI hardware is provided by TA1, it does not necessarily have to be the case that TA1’s algorithm command and control system manage the execution of the HCI.

Q3: Page 13 states, “the Exploitation Component must also selectively process image- and plot-level data (e.g., video from an unmanned aerial vehicle (UAV) without automatic target detection and tracking, a report of an HVI sighting at a checkpoint)”. This implies a potential need to store/retrieve unprocessed sensor data. What are the expectations on TA1 for this? Can we assume that, if needed, such data will simply be passed through as received or must we store it for later use?

A3: The data will be passed through as received and, potentially, pulled from the sensor’s local database.

Q2: Page 13 states, “If the performers for Technical Areas 2 – 4, 6, 9 require exotic hardware or software environment components, they will provide and maintain instances at both the TA1 performer’s home facility and Physical Test Bed.” Can we assume that this includes power and cooling for such exotic hardware, or should we allow a margin in our hardware configuration to support this?

A2: Power and cooling requirements well beyond those expected in a normal high performance computer center may be considered exotic, and left for subsequent negotiation.

Q1: Page 13 states, “DARPA anticipates that advanced integration, processing and data archive algorithms will be available for inclusion . . .” Will we be free to evaluate for inclusion such algorithms, or will there be a requirement to include them?

A1: After the detailed process mentioned in a number of answers above, upon final acceptance by the Government, you will be required to integrate them into the system.